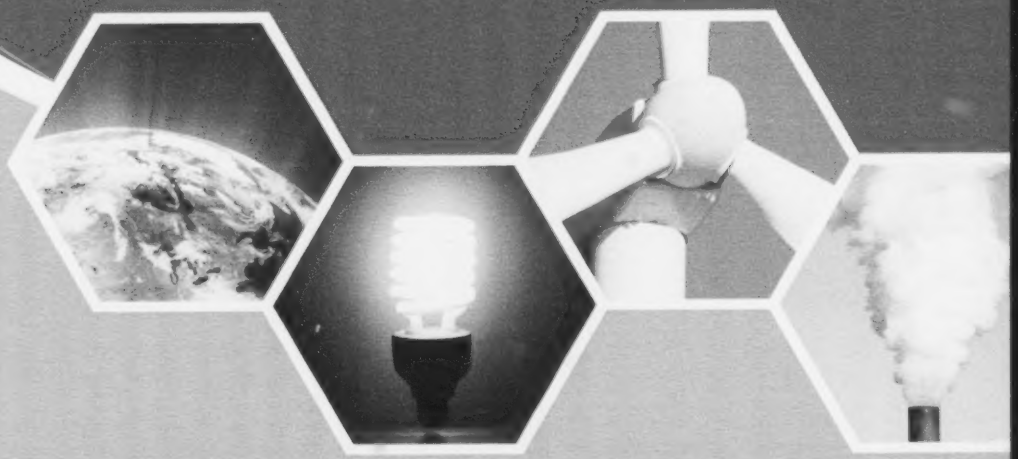
Newfoundland Labrador

Office of Climate Change, Energy Efficiency & Emissions Trading

Annual Report 2011-2012



Message from the Minister Responsible for the Office of Climate Change, Energy Efficiency and Emissions Trading

In accordance with government's commitment to accountability, I am pleased to present the 2011-12 Annual Report for the Office of Climate Change, Energy Efficiency and Emissions Trading, which is a central agency located within Executive Council. As a category two government entity, this report addresses the Office's activities and outputs from April 1, 2011 to March 31, 2012, which is the first reporting period for the Office's 2011-2014 business plan. As Minister, I am accountable for the results that are reported in this document.

Our Government believes that climate change is one of the most challenging issues facing the world and our province today. But with great challenges come great opportunities. Opportunities such as the chance to generate a major shift in the uptake of energy efficiency and enjoy the multiple benefits this will bring. Our Government is committed to show leadership and take action to ensure our province is a model of economic and environmental sustainability. The Office works to establish a path forward and advance sustained action on climate change and energy efficiency that effectively balances economic and environmental considerations. By strengthening the evidence base, providing expert advice to departments, and collaborating with other governments and stakeholders, it has strengthened our capacity to address these challenges.

The past year was a significant one for the Office as it led the development of *Charting Our Course: Climate Change Action Plan 2011* and *Moving Forward: Energy Efficiency Action Plan 2011*, which were released on August 16, 2011. These Action Plans set out Government's vision and strategic approach to climate change and energy efficiency. They contain 75 action items aimed at enhancing our resilience to the impacts of climate change, reducing greenhouse gas emissions, and generating a major shift in the uptake of energy efficiency.

As the lead government entity responsible for policy and strategy development, the Office was responsible for the development of the Action Plans and, looking forward, will oversee their implementation. This includes delivering on those commitments that fall directly to the Office, such as developing a policy approach for large industrial companies, delivering Government's first-ever public awareness campaign on climate change and energy efficiency, supporting other departments with their undertakings, and tracking and reporting on progress.

Honourable Terry French
Minister Responsible for the Office of Climate Change, Energy Efficiency and Emissions Trading

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1. Overview

The Office of Climate Change, Energy Efficiency and Emissions Trading (CCEEET) is a Central Agency located in Executive Council. CCEEET is the lead government entity responsible for policy and strategy development on climate change and energy efficiency. The Office is responsible for establishing a path forward for the province on these issues and advancing sustained action that effectively balances economic and environmental considerations, including deepening public awareness, understanding and engagement.

The Office also undertakes focused research and analysis to enable the province to maximize opportunities and minimize risks from climate change and the move towards a low-carbon global economy. The Office works to strengthen the evidence base for action, which includes projections of the province's greenhouse gas emissions, research on the impacts of climate change, exploring key policy issues such as energy efficiency standards and building codes, and liaising with outside entities and stakeholders to garner their input and expertise.

In addition, the Office works to better integrate climate change and energy efficiency considerations into current and future programs, services, legislation and regulations, and ensure effective coordination across government. The Office acts as an advocate for these issues within government to raise their profile, assist departments understand the implications for their work, and ensure that the right policy approaches are being pursued.

The Office is also advancing the province's interests in regional, national and international forums on climate change and energy efficiency, and is engaging external stakeholders to deepen Government's dialogue on policy and strategy development. The Office represents the Provincial Government on a wide range of federal, provincial and territorial forums and also engages external entities and stakeholders including large industrial companies, electrical utilities, and the Nunatsiavut Government and Innu Nation.

The Office is currently comprised of eight staff members (six female and two male) and is located on the 5th Floor, West Block, Confederation Building, St. John's.

During fiscal year 2011-12, the Office expended $1,254,637 to achieve its mandate. This funding was used for salary and operating costs, and for professional service contracts to support the development and implementation of the 2011 *Climate Change Action Plan* and *Energy Efficiency Action Plan*. Additional financial detail is provided in Section 9.

1.1 Vision

The vision of the Office of Climate Change, Energy Efficiency and Emissions Trading is of a province that achieves economic, social and environmental success by effectively integrating progressive action on climate change and energy efficiency.

1.2 Mandate

The mandate of the Office is to lead strategy and policy development across government in the areas of climate change, energy efficiency and emissions trading.

1.3 Mission

By 2017, the Office of Climate Change, Energy Efficiency and Emissions Trading will have advanced the province's capacity to reduce greenhouse gas emissions, adapt to the impacts of climate change and improve energy efficiency.

The mission statement identifies the priority focus areas over two planning cycles. It represents the key longer-term results that the Office will be working towards as it moves forward on the strategic directions of government. A full mission statement including measures and indicators has been included in the Office's 2011-14 Business Plan.

1.4 Lines of Business

The Office of Climate Change, Energy Efficiency and Emissions Trading is responsible for four lines of business. The lines of business have been expanded from three to four for this planning cycle to better reflect the nature of the ongoing work of the Office.

- Policy and Strategy Development
- Promoting Government-wide Action
- Strengthening the Evidence Base
- Representing the Province in Intergovernmental Forums and Engaging External Stakeholders

Policy and Strategy Development

The Office has lead responsibility within government for policy and strategy development on climate change and energy efficiency. This includes analyzing the implications of different policy approaches to achieve Government's greenhouse gas reduction and energy efficiency targets and desired outcomes, identifying the impacts of climate change and economic opportunities for the province, assessing the implications of national and international developments for the province, and overseeing delivery of the 75 commitments in the Climate Change and Energy Efficiency Actions Plans owned by 13 different entities including the Office (which is responsible for 17 commitments).

Strengthening the Evidence Base

Effective action on climate change and energy efficiency must be based on a sound evidence base of analysis and research. The Office is responsible for undertaking analysis and collecting data and information from a variety of sources to inform policy-making in the areas of climate change mitigation, climate change adaptation and energy efficiency. This work includes

identifying and addressing information and data gaps through a systematic, long term approach that requires the use of both internal and external expertise.

Promoting Government-wide Action

The need for Government leadership was a major theme arising from the consultations on climate change and energy efficiency held in 2010. It forms the basis of one of the key goals in both the 2011 Climate Change Action Plan and 2011 Energy Efficiency Action Plan, namely, a commitment that government will lead-by-example. To support that goal, the Office provides specialist knowledge and expertise to government departments and agencies to strengthen their understanding of climate change and energy efficiency, and to help them integrate these issues into their ongoing operations, programs, legislation, and regulations. The Office aims to drive action and ensure a coordinated approach to the opportunities and challenges, ensuring resources are directed to where they will have most impact.

Representing the Province in Intergovernmental Forums and Engaging External Stakeholders

The Office represents the province's interests at numerous regional, national and international forums. The Office has an extensive network of contacts in other jurisdictions which it actively engages to advance the province's policy objectives. In addition, the Office works with other external stakeholders to help inform policy analysis and guide the implementation of commitments, including large industry companies, the electrical utilities, industry associations, Memorial University, non-governmental organizations, and the Nunatsiavut Government and Innu Nation.

2. Shared Commitments

Climate change and energy efficiency are cross-cutting issues that affect a wide number of economic sectors and government departments. This is one of the key strategic reasons why CCEEET was established as a Central Agency in Executive Council. It is imperative that the Office is regarded as a broker across departments, as it must balance economic and environmental considerations and be viewed as an independent and authoritative voice within government and externally. This is a similar model that has been employed for entities with cross-cutting mandates such as Rural Secretariat, Voluntary and Non-Profit Secretariat and Women's Policy Office, and works very effectively. From understanding and adapting to the impacts of climate change, to driving a major shift in the uptake of energy efficiency, achieving success depends on better integration within, and collaboration among, Provincial Government entities, other governments, communities and external stakeholders.

The Provincial Government's 2011 Climate Change and Energy Efficiency Action Plans show how wide ranging the issues are, as the Plans touch on all sectors of the economy from industry and small and medium-sized businesses to households and individuals. CCEEET led the development of the Action Plans and will oversee their implementation, but the breadth and reach of new commitments is extensive and goes well beyond the mandate of CCEEET. The 75 commitments that span the two Action Plans are owned by 13 separate government entities. This broad based ownership is critical to ensuring the issues are properly integrated into department's work and activities.

As Government continues to move forward with the implementation phase of the Action Plans, ongoing effort is needed to promote effective collaboration and drive progress. For example, one of the commitments that CCEEET is responsible for is delivering Government's first-ever public awareness campaign on climate change and energy efficiency. While CCEEET is accountable for this commitment, it is collaborating extensively with other departments, Crown Corporations and stakeholders to ensure that messages are accurate, consistent, comprehensive, and well-targeted to deepen understanding and drive change.

3. Key Accomplishments and Priorities

Publication of Climate Change and Energy Efficiency Action Plans

On August 16, 2011, the Provincial Government released *Charting our Course: Climate Change Action Plan 2011* and *Moving Forward: Energy Efficiency Action Plan 2011*. The development and publication of these plans was CCEEET's principle accomplishment for 2011-12. The work necessitated extensive cross departmental consultation and engagement to secure buy-in for next steps.

The Action Plans set out Government's five-year path on climate change and energy efficiency. Government's goals are comprehensive and touch on several key areas including enhancing resilience to climate change, reducing greenhouse gas emissions, promoting a major shift in the uptake of energy efficiency, demonstrating leadership by example and collaborating with other governments.

The publication of the two Action Plans was the culmination of a comprehensive strategy development process that was kick-started by consultations in 2010. On May 31, 2010, Government launched a public discussion document entitled *Responding to Climate Change in Newfoundland and Labrador*. Written submissions received were complemented by input from 13 consultation sessions held across Newfoundland and Labrador in spring 2010. Sessions were held with a broad range of representatives from industry, academia, municipalities, labour organizations and the voluntary and not-for-profit sector. These consultations were complemented by bilateral dialogues with entities including the large industrial companies, electrical utilities, Memorial University and other governments in Canada. In both Action Plans, readers can find a summary of the key messages heard during the consultations and government's response.

In addition to consultations, the development of the Action Plans was also supported by efforts to enhance Government's evidence base on climate change and energy efficiency. CCEEET led a number of studies, each available on its website, that looked at several key issues including the impacts of climate change in Newfoundland and Labrador, how other provinces and territories have designed programs on energy efficiency, the impact of carbon pricing on the province and, in partnership with the Department of Innovation, Business and Rural Development, the economic opportunities associated with the Green Economy.

Government made a strategic decision in the Action Plans to have a strong accountability framework in light of the scope of commitments (75) and breadth of responsibilities (13 separate entities own commitments). Government committed to make an annual statement in the House of Assembly on progress each year, complemented by more comprehensive reports on

performance at the mid-point and final year of the Plans. CCEEET has developed an Accountability Framework to track performance.

Another aspect of the Action Plans is Government's greenhouse gas reduction and energy efficiency targets. In the Climate Change Action Plan, Government reaffirmed its commitments to reduce greenhouse gas emissions to 10 per cent below levels in 1990 by 2020, and 75-85 per cent below 2001 levels by 2050. In the Energy Efficiency Action Plan, Government reaffirmed its commitment to the Conference of New England Governors and Eastern Canadian Premiers' target to reduce energy use by 20 per cent by 2020, from business-as-usual projections.

The publication of both Action Plans was a significant achievement for 2011-12, but each Plan also recorded a first for Government:

- *Charting Our Course: Climate Change Action Plan 2011* included Government's first Climate Change Adaptation Strategy for northern Labrador, fulfilling a commitment from the 2007 Northern Strategic Plan. Climate change is occurring faster, and the impacts will be more pronounced, in northern Labrador relative to the rest of the province. As a result, Government developed tailored priorities for adaptation in the north and included them as a separate strategy within the Action Plan. These were developed, and will be taken forward in consultation with the Nunatsiavut Government and Innu Nation.

- The publication of *Moving Forward: Energy Efficiency Action Plan 2011* was the first Provincial Government strategy dedicated solely to energy efficiency. Government made a strategic decision to publish a separate strategy on energy efficiency recognizing that, while energy efficiency is a key solution to climate change as it reduces reliance on fossil fuels, the benefits go well beyond this and also include lower household energy bills, improved business competitiveness, lower air pollutants, and freeing up more energy for export to international markets.

Looking forward, one of CCEEET's central responsibilities will be overseeing implementation of the Action Plans and delivering the 17 commitments that it owns. CCEEET will also track progress on delivering all the commitments in the Plans and working collaboratively with other entities to ensure they have the expertise, tools and support to fulfill their commitments.

4. Report on Performance

March 31, 2012 marks the end of the first year of the Office's three year business plan for 2011-14. The plan identified two business issues that will guide the work of the Office over 2011-14: climate change adaptation; and energy efficiency and greenhouse gas reduction. This section reports on the goals for each issue, as well as the objectives for the 2011-12 year in support of those goals.

Issue 1: Climate Change Adaptation

The Earth's climate is changing. Globally, each of the last three decades has been the warmest on record, and in the Arctic the warming is occurring twice as fast as the rest of the world. In Newfoundland and Labrador, our climate is being affected and, with it, other changes to our environment are being seen like an increase in sea-levels, more intense weather events and poor winter ice conditions in Labrador.

As a result of these changes, a key part of the overall response to climate change has to be adapting to the impacts of climate change. Governments, communities, businesses and individuals need to understand, plan for, and respond to climate change to enhance the province's resilience and position it to prosper through the changes. This could include, for example, new community planning practices to avoid areas at risk of flooding or sea-level rise, building infrastructure to higher standards, and identifying and managing any risks to business, such as the impact of extreme weather.

Climate change adaptation goals support the strategic directions of government as communicated through the Minister Responsible for Climate Change, Energy Efficiency and Emissions Trading to advance the province's ability to understand and adapt to climate change.

In *Charting Our Course: Climate Change Action Plan 2011*, the Provincial Government set out a goal to enhance the province's resilience to climate change, recognizing that "efforts to reduce greenhouse gas emissions must of course go hand-in-hand with moves to adapt to unavoidable impacts of climate change."

Goal 1: By 2014, the Office will have advanced initiatives towards improving the province's preparedness and resilience for the impacts of climate change. **Measure:** Initiatives are developed and advanced.	**Indicators:** • Released a Climate Change Action Plan. • Supported the implementation of the Climate Change Action Plan. • Advanced initiatives to strengthen the understanding of the impacts of climate change on the province. • Enhanced collaboration with other levels of government, industry, communities and researchers on climate change impacts and adaptation. • Developed initiatives to strengthen public knowledge and awareness about climate change.

Objective 1.1	By March 31, 2012, the Office will have established a strategic framework to strengthen climate change adaptation in Newfoundland and Labrador.
Measure: Strategic framework is established.	
Indicators:	**Progress**
Released a Climate Change Action Plan.	On August 16, 2011, *Charting our Course: Climate Change Action Plan 2011* was released. A key goal of the Action Plan is to "Enhance Newfoundland and Labrador's resilience to the impacts of climate change". This is supported by two objectives: (1) Strengthen the

	understanding of the impacts of climate change on the province; and (2) Improve the integration of climate change adaptation into decision-making. A total of 18 commitments are targeted at achieving this goal. The Action Plan also contains Government's Climate Change Adaptation Strategy for northern Labrador, fulfilling a commitment from the Northern Strategic Plan. This is Government's first-ever strategy on adaptation in the north.
Commenced implementation of the Climate Change Action Plan.	The Office developed an Accountability Framework for the Climate Change Action Plan. This framework identifies which government entity 'owns' each commitment and is responsible for delivering the desired outcomes. The Office worked with departments to identify baselines, indicators, and desired results to guide implementation of each of the commitments. The Office is responsible for the coordination and monitoring of progress. The Office continued to lead interdepartmental processes to support implementation of the Climate Change Action Plan including supporting Ministerial and Deputy Ministerial on Committees on Climate Change and Energy Efficiency. The work of these committees includes strategic advice on implementing the Climate Change Action Plan and analysis of potential Budget priorities that will support the implementation of the Action Plan. Departments represented on these committees include Environment and Conservation; Natural Resources; Finance; Innovation, Business and Rural Development; Transportation and Works; Intergovernmental and Labrador Affairs Secretariat; and Municipal Affairs. CCEEET led the development of the Common Budget Submission on Climate Change and Energy Efficiency, a horizontal budget initiative recognizing that climate change and energy efficiency are shared challenges that cut across departments. In Budget 2011 this led to several new strategic investments including: • $1.8 million over three years to create new flood risk maps for the province, which include predictions of how climate change will affect flood risk areas. These maps are a key tool to help planners avoid areas that are at risk of flooding, which is one the most costly natural hazards in Newfoundland and Labrador. • $300,000 over three years to establish a province-wide coastal erosion monitoring and mapping program. This initiative, the first of its kind in the province, is designed to provide a decision making tool to communities to avoid development in areas at risk of erosion.

	• $450,000 over three years to develop Government's first-ever public awareness campaign on climate change and energy efficiency. This campaign is under development and will be launched in 2012/13. Enhancing public awareness is the key to advancing province-wide action on climate change and energy efficiency.
Developed initiatives to improve the understanding of climate change monitoring capabilities in the province and the needs of key sectors as it relates to climate data and information.	The Office led a study of climate change monitoring capabilities in Newfoundland and Labrador. This study included three core components: • An inventory of all existing, discontinued and planned climate monitoring stations in Newfoundland and Labrador. This inventory captures key details including what variables are measured at each station, where it is located and how the public can access its data. • A comprehensive analysis of the needs of the climate data user community, this was supported by an interview and questionnaire process which secured feedback from 50 entities in the public, private and academic sectors. • A set of recommendations to strengthen the province's ability to monitor climate change in the province. These recommendations apply to both climate data (i.e. what is collected at a climate station) as well as key information products such as long term climate forecasts, using remote satellite imagery and key tools to prepare for intense rain events. In advance of the roll out of a public awareness campaign on climate change and energy efficiency, CCEEET undertook a public opinion survey on public awareness. This survey will provide a baseline against which to measure the effectiveness of the campaign. 802 residents of Newfoundland Labrador were surveyed, 400 in St. John's area and 402 throughout the rest of the province, to obtain baseline data on public opinion related to climate change and energy efficiency. The survey size provided an accuracy level of 95 per cent confidence within 3.5 percentage points for the province. The survey included several questions relating to climate change impacts and adaptation to assess the extent to which the public: (i) associates climate change with rising temperatures and changes in weather patterns; (ii) believes climate change is happening and that it is caused by human activity; (iii) believes climate change is a relevant issue for the province; and (iv) thinks government and individuals should take action.

Engaged with other governments and stakeholders, including the research and academic community, to enhance the information and understanding of the impacts of climate change on Newfoundland and Labrador.	In the 2011 Climate Change Action Plan, Government set out its first-ever Climate Change Adaptation Strategy for northern Labrador – fulfilling a commitment from the Northern Strategic Plan. In order to develop this strategy, the Office supported working groups with the Nunatsiavut Government and Innu Nation, which included topic experts from academic institutions, to strengthen the dialogue on climate change impacts and adaptation in northern Labrador. Climate change will have an impact province-wide; however, evidence has shown that it is occurring much faster in the north than the rest of the province. The Office gave several presentations to forums including: • *Northern Forum / Polarview Workshop on Climate Change Adaptation in the North*, held in St. John's on March 26 and 27, 2012. The objective of this conference was to look at how to improve decision-making on climate change in the north through advanced tools such as remote satellite imagery. Attendees came from around the world from countries including Russia, China, Finland, and the United States (US). CCEEET presented on the impacts of climate change in Newfoundland and Labrador and the Provincial Government's strategic approach to adaptation as set out in the 2011 Climate Change Action Plan. • *Building Healthy Communities: Bringing Health and Wellness to the Community Planning Table*, held in St. John's on November 29 and 30, 2011. The objective of the conference was to raise awareness of how the built environment, like buildings, roads, other infrastructure, affect the health of communities. The Office outlined the impacts of climate change in Newfoundland and Labrador that will impact the built environment, like more severe weather, sea-level rise or coastal erosion, and how adaptation can be built in to community planning and development. The presentation focused heavily on local case studies around Newfoundland and Labrador showcasing how specific communities have strengthened resilience. The Office also participated in a number of conferences of workshops including: • Represented Newfoundland and Labrador on Canada's delegation to the United Nations Climate Change Conference in Durban, South Africa, held November 28 – December 10, 2011. Adaptation to climate change was a key focus of the conference, in particular how the developed countries such as Canada, the US and Europe will help developing countries adapt to the

	impacts of climate change. • Participated in a workshop hosted by Memorial University on the impacts of climate change on archaeological resources around the coast of Newfoundland and Labrador, held on January 26, 2011. The workshops looked specifically at recent research and publications on the impacts of climate change and set out next steps to guide collaboration among various entities to address this challenge. • Participated in the Aquatic Climate Change Adaptation Services Program (ACCASP) Regional Workshop, held March 27, 2012. This workshop, hosted by Fisheries and Oceans Canada, explored the impacts of climate change and what this means for the ocean and fish species.

Objective 1.2	By March 31, 2013, the Office will have increased the province's capacity to understand and adapt to the impacts of climate change.
Measure: Provincial capacity to understand and adapt is increased.	
Indicators: • Advanced initiatives to strengthen the understanding of the impacts of climate change on the province. • Continued implementation of the Climate Change Action Plan. • Enhanced collaboration with other levels of government, industry, communities and researchers on climate change impacts and adaptation.	

Issue 2: Energy Efficiency and Greenhouse Gas Reduction

Energy Efficiency

We rely on energy throughout our day to heat and light our homes, power our computers and equipment at work, and fuel our cars and trucks to get where we need to be. Our lives, and indeed our entire economies, rely on the use of energy. Over time our use of energy has grown significantly. The size of an average home in Canada continues to increase, and there are a larger number of lights, appliances and electronics in households today.

Energy efficiency refers to using less energy to provide the same or better level of service. This can include simple and no-cost actions such as turning off lights and televisions when they are not in use, powering down office equipment at the end of the day, and not idling vehicles can save energy which would have otherwise been wasted. It can also include insulating a basement or installing high-efficiency windows to reduce energy costs while increasing comfort levels, or buying only those computers and appliances that are ENERGY STAR certified – the gold standard in energy efficiency for home and office products.

Energy efficiency plays a key role in the battle against climate change. It reduces reliance on carbon-intensive fuels like gasoline and oil, but it also has a much wider set of economic benefits such as lower energy bills for households, improved business competitiveness, increased power to export to other jurisdictions, improved consumer welfare and lower local air pollutants.

Energy efficiency goals support the strategic directions of government as communicated through the Minister Responsible for Climate Change, Energy Efficiency and Emissions Trading to support the promotion of energy efficiency and the reductions of greenhouse gas emissions in Newfoundland and Labrador.

In *Moving Forward, Energy Efficiency Action Plan 2011*, the Provincial Government set a goal to support a major shift in the uptake of energy efficiency, recognizing the "tremendous opportunity for economic development and environmental progress" that energy efficiency offers. The Action Plan reaffirms Government's commitment to the Conference of New England Governors and Eastern Canadian Premier's target of reducing overall energy use by 20 per cent by 2020 from business-as-usual projections.

Greenhouse Gas Reduction

The Earth is surrounded by a layer of naturally occurring gases that include water vapour, carbon dioxide, methane and nitrous oxide. These are commonly referred to as "greenhouse" gases because, like the walls of a greenhouse, they trap some of the heat from the sun and this warms the planet and makes it livable. Without these gases, the Earth would be too cold to support life we as know it.

The problem is, over the past 150 years, humans have been adding significantly to this layer by releasing more and more greenhouse gases by burning increasing quantities of oil, gas and coal, cutting down trees and clearing land. Now there is too much of these gases in the Earth's atmosphere. In the last 100 years, concentrations of carbon dioxide have increase by 40 per cent, methane by 150 per cent and nitrous oxide by 20 per cent. These gases are trapping too much heat and this is causing the global average temperature to increase and the earth's climate to change.

Greenhouse gas reduction goals support the strategic directions of government as communicated through the Minister Responsible for Climate Change, Energy Efficiency and Emissions Trading to support the promotion of energy efficiency and the reductions of greenhouse gas emissions in Newfoundland and Labrador.

In *Charting Our Course: Climate Change Action Plan 2011*, the Provincial Government recognized that Newfoundland and Labrador "must be part of the solution and play its part in responding to climate change." A key goal of the plan was reducing greenhouse gas emissions in the province. In the Plan, Government reaffirmed its commitment to purse the targets of the Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP) on a provincial basis. This includes reducing greenhouse gas emissions by 10 per cent below 1990 levels by 2020 and 75-85 per cent below 2001 levels by 2050.

Goal 2: By 2014, the Office will have supported actions to reduce greenhouse gas emissions and promote energy efficiency in Newfoundland and Labrador. **Measure:** Actions that reduce greenhouse gas emissions and promote energy efficiency are supported.	**Indicators:** • Released a Climate Change Action Plan and an Energy Efficiency Action Plan. • Supported the implementation of a Climate Change Action Plan and an Energy Efficiency Action Plan. • Improved the evidence base to support decision making and policy development, including updating greenhouse gas projections and monitored trends over time. • Implemented a public awareness campaign designed to strengthen the public's understanding and awareness of the importance of energy efficiency and reducing greenhouse gases. • Represented the province's interests with the federal government and in intergovernmental meetings at the officials' level.

Objective 2.1	By March 31, 2012, the Office will have established the province's strategic policy framework to promote energy efficiency and reduce greenhouse gas emissions.
Measure: Strategic policy framework is established.	
Indicators:	**Progress**
Released a Climate Change Action Plan and an Energy Efficiency Action Plan.	On August 16, 2011, the Provincial Government released *Charting Our Course: Climate Change Action Plan 2011* and *Moving Forward: Energy Efficiency Action Plan 2011*. In *Charting Our Course*, one of the goals was to "Reduce greenhouse gas emissions in Newfoundland and Labrador". To that end, the Provincial Government reaffirmed its commitments to achieve the GHG reduction targets of the Conference of NEG-ECP on a provincial basis. These are to stabilize GHG emissions at 1990 levels by 2010 and reduce GHG emissions by 10 per cent below 1990 levels by 2020 and 75-85 per cent below 2001 levels by 2050. (To note, there is a 16 month delay in data reporting, therefore 2010 levels will not be known until April 2012.) In *Moving Forward*, one of the goals was to "Support a major shift in the uptake of energy efficiency". As part of the Plan, the Provincial Government reaffirmed its commitment to the target set by the Conference of NEG-ECP to reduce energy consumption by 20 per cent by 2020 from business-as-usual projections.
Enhanced linkages with other levels of government, the research and academic community and other	To enhance the information and understanding of promoting energy efficiency and reducing greenhouse gas emissions in Newfoundland and Labrador, the Office has been proactive in its efforts to extend and deepen it links

stakeholders to enhance the information and understanding of promoting energy efficiency and reducing greenhouse gas emissions in Newfoundland and Labrador.	with other jurisdictions and stakeholders, with a view to enhancing information and understanding about how best to improve energy efficiency and tackle climate change. **Energy Efficiency:** The Office participated on a range of working groups to promote energy efficiency. This included: • Steering Committee on Energy Efficiency – This committee, made up of federal, provincial and territorial senior officials, oversees the development and implementation of energy efficiency priorities of the Energy and Mines Ministers' Conference. There are several targeted working groups under this committee that CCEEET also participates on, including: ○ Built Environment and Equipment Working Group – This committee provides expert advice to the National Research Council on the development of model national energy codes for buildings and houses. ○ Transportation Working Group – This group is heavily focused on promoting fuel-efficiency among heavy trucks in Canada through the provision of better information and tools. It is currently working to pilot the "Smart Way" program from the U.S. Environmental Protection Agency, which is specifically designed to help reduce GHG emissions and local air pollutants, and help truckers save on fuel costs, through more fuel-efficient activities. ○ Industry Working Group – This group is focused on promoting the understanding and adoption of the ISO 50001 Energy Management Systems Standard, which provides organizations with a framework to increase energy efficiency, reduce energy costs and improve energy performance. • Canadian Advisory Committee on Energy Efficiency, which was initiated in 2011/12 to advance national collaboration and progress on product standards. Work in 2011/12 focused on finalizing the organizational and governance structure and information sharing regarding provincial and territorial initiatives. • Provincial Government and Electrical Utilities Working Group on Energy Efficiency. The Office continued to chair and coordinate activities of the energy efficiency working group, established in 2010 with the Department of Natural Resources and the electrical utilities (Newfoundland and Labrador Hydro and Newfoundland Power). This group exchanges information and ideas provides a structure within the province to discuss energy efficiency policy. • The Office also sits on the Provincial Governments

	Build Better Buildings (BBB) Policy committee, made up of government departments. This committee oversees the implementation of the BBB Policy which requires that all new government owned or government-funded buildings and major renovations exceed the 1997 Model National Energy Code for Buildings by 25 per cent and, where practical, qualify for Leadership in Energy and Environmental Design (LEED) Silver status. Greenhouse Gas Mitigation: • Activities related to greenhouse gas mitigation focused on the large industrial sector, specifically the evaluation of potential policy approaches to fulfill the commitment in the Climate Change Action Plan to "Develop, and publicly release in 2012, a detailed approach for the energy-intensive sector on climate change." The Office has evaluated different policy approaches and met with officials in Quebec, Ontario, Saskatchewan, Alberta, British Columbia, the federal government and the Western Climate Initiative to discuss the opportunities, challenges and potential ways to reduce greenhouse gas emissions from large industry. The Office also attended meetings hosted by North America 2050 (NA2050), an emerging network of Canadian provinces and US states that is undertaking research related to greenhouse gas mitigation and the sub-national level in North America. • The Office participated on a range working groups related to greenhouse gas reduction. This includes: ○ Domestic Climate Change Committee and International Climate Change Committee, both of which include federal, provincial and territorial representation. The Domestic Committee also includes a specific working group dealing with the oil and gas sector (including oil refining) and a Deputy Minister-level group on GHG regulations for the industrial sector. The International Committee is the core group that makes up Canada's delegation to the United Nation's Climate Change Conference each year. ○ Conference of the New England Governors-Eastern Canadian Premiers' Climate Change Steering Committee. The focus of the committee is to identify regional level strategies and initiatives to reduce greenhouse gas emissions, as well as tracking performance against the Premiers' and Governors' regional greenhouse gas reduction targets. • The Office participated in a study by the National Roundtable on the Environment and the Economy (NRTEE), funded by the federal government that

examined the potential impact on national greenhouse gas reductions resulting from provincial and territorial activities. This including bilateral consultations with NRTEE as well as participation on panel discussions at a federal-provincial-territorial and academic forum hosted at Queen's University in Kingston in March 2012.

External Presentations:

CCEEET gave a number of presentations in 2011/12 relating to greenhouse gas emissions and energy efficiency, including:

- *Northeast Avalon Regional Development Board Forum on Sustainable Transportation* on May 12, 2011. The presentation discussed the linkages between transportation and climate change, energy use in the province, the impacts of climate change in Newfoundland and Labrador, what sustainable transportation means for the province and what other jurisdictions are doing.
- *Building Owners and Managers Association of Canada's National Conference and Exhibition (BOMEX)* 2011, held in St. John's, September 25-27, 2011. CCEEET delivered a presentation on why the commercial building sector should care about climate change and energy efficiency and what the Provincial Government and other jurisdictions are doing about these challenges.
- *Work In A Warming World Atlantic Forum: Saving The Planet and Creating Jobs*, held at the University of New Brunswick in Fredericton, September 29-30, 2011. The conference looked at ways to "fight climate change while creating jobs, not losing them." CCEEET's presentation focused on the economic development opportunities associated with the green economy in Newfoundland and Labrador. The basis of this presentation was the collaborative study on the green economy undertaken in partnership with the Department of Innovation, Business and Rural Development.
- *Side Events at the United Nations Climate Change Conference* held in Durban, South Africa November 28 – December 10, 2011. CCEEET presented at panel discussions hosted by the International Institute for Sustainable Development and the International Emissions Trading Association. These organizations set up discussions to allow provinces and territories to provide an overview to international delegates, academic researchers and non-governmental organizations of their policy approach to greenhouse gas reduction.
- *Strategic Partnership Council - Innovation Sub-*

	Committee meeting on March 2, 2012. CCEEET presented on the opportunities and challenges associated with the green economy in Newfoundland and Labrador. The Strategic Partnership is a partnership of business, labour and government dedicated to improving the quality of life of the people of Newfoundland and Labrador through sustainable, balanced economic and social development. • *NL Canadian Home Builders' Association's Annual Conference held on March 28, 2012.* The presentation focused on (i) energy consumption trends and the role of energy efficiency, energy efficiency incentives and building codes in reducing energy consumption in the residential sector, and (ii) the green economy study, referenced below, with particular emphasis on opportunities in green building practices and energy efficiency.
Improved the evidence base to support decision-making and policy development, including updated greenhouse gas projections for the province and monitored progress on reducing emissions.	**Energy Efficiency:** The Office completed two studies that furthered its knowledge base about energy efficiency, both of which are available on its website (www.gov.nl.ca/exec/cceeet). These two studies included: • A "Study of Methodologies on Outcomes of Mitigation Initiatives", which undertook a comparative review of energy models to identify methodologies to determine the impacts of programs on overall energy use and greenhouse gas emissions. • A "Report on Canadian Energy Efficiency Programs" outlines a comparative review of residential, commercial, industrial and transportation energy efficiency programs in Canada. Both studies were completed in partnership with the Department of Natural Resources, the Department of Finance and the electric utilities. **Greenhouse Gas Mitigation:** The Office updated greenhouse gas projections for the province and published these projections in the 2011 Climate Change Action Plan. These projections cover the period from 2010 to 2020 and included the Muskrat Falls hydroelectric development. After the release of the Action Plan, the Office initiated a process to further update the projections with a view to extending the projection period to 2030. These projections will be completed in 2012/13. The Office monitors greenhouse gas emissions on an ongoing basis using federal data published in Canada's annual emissions inventory filed with the United Nations. This inventory showed that greenhouse gas emissions in the

	province have declined in recent years. This is due to several factors, including the fact that offshore oil platforms past peak flaring, and that industrial demand and warmer winters reduced the need for electricity generation. The Climate Change Action Plan indicated that the province would approach, if not achieve, its 2010 target. Data for 2010 will not be released until 2012/13. The Office initiated two studies, one concerning the offshore oil and another iron ore mining. The aim of the projects is to develop a detailed account of the range, type and cost of existing, emerging and potential greenhouse gas abatement technologies, capital equipment, processes and management practices that could potentially be employed in the province's offshore oil and iron ore mining industries. The projects will also develop a comparative overview of how greenhouse gas emissions are regulated in these industries in other jurisdictions, and to outline how greenhouse gas regulation could potentially be structured for these industries to facilitate investment, production and economic efficiency while minimizing competitive distortions and delivering desired environmental outcomes. **Green Economy:** The Office partnered with the Department of Innovation, Business and Rural Development on a study to identify the economic development, trade and employment opportunities associated with greening the economy in Newfoundland and Labrador. Greening the economy is a concept that is gaining considerable public interest and political attention around the globe. The aim is to identify how economic growth can be driven by the green agenda. The study involved a comprehensive analysis of the current and potential future green economy opportunities in Newfoundland and Labrador and was based on a review of global development and outlooks for key green sectors. Nine key sectors were identified: sustainable resource management, green energy supply, green building, green transportation, environmental protection, waste management and recycling, sustainable tourism, energy efficiency and conservation, and green knowledge and support. The report concluded that with the right supports the 'green economy' could grow by up to 30 per cent by 2020. There were 66 recommendations in the report covering 13 categories of opportunities.
Developed a public awareness campaign designed to strengthen the public's understanding and awareness of the importance of	Responding to key messages from the 2010 consultations, Budget 2011 provided funding for a public awareness campaign on climate change and energy efficiency. This campaign was developed and will be launched in 2012/13.

energy efficiency and reducing greenhouse gases.	In order to establish a baseline to assess the impact of the campaign, 802 residents of Newfoundland Labrador were surveyed, 400 in St. John's area and 402 throughout the rest of the province, to obtain baseline data on public opinion related to climate change and energy efficiency. The survey size provided an accuracy level of 95 per cent confidence within 3.5 percentage points for the province. The survey sample was representative of population – age, gender and education. The sampling frame was defined as a permanent resident of the household, 18 years of age or older. A stratified random sampling approach was used to create a telephone call list for the survey. Enhancing public awareness is the key to advancing province wide action on tackling climate change and promoting energy efficiency.

Objective 2.2	By March 31, 2013, the Office will have advanced initiatives to strengthen the evidence base and improved the province's capacity to promote energy efficiency and reduce greenhouse gas emissions.
Measure: Provincial capacity to promote energy efficiency and reduce greenhouse gas emissions is increased.	
Indicators: • Advanced initiatives to strengthen understanding of the importance of energy efficiency and reducing greenhouse gas emissions. • Continued implementation of the Climate Change and Energy Efficiency Action Plans. • Enhanced collaboration with other levels of government, industry, communities and researchers to enhance information and understanding of energy efficiency and greenhouse gas emissions in Newfoundland and Labrador.	

5. Opportunities and Challenges

Opportunities

Climate change is not just an environmental issue; it is equally an economic, social and political issue. From an environmental perspective, jurisdictions agree that climate change is happening and requires prompt and serious action. Therefore, the key outstanding consideration is now an economic one: how will jurisdictions' position their economies to ensure they maximize the opportunities, and minimize the risks, associated with operating in an increasingly GHG constrained world. Those jurisdictions that engage proactively in the debate will be best placed to address these challenges effectively, as they will shape the rules and help prepare their economies for the fundamental changes to come. Jurisdictions that fail to grapple with the agenda may incur higher costs in long run, miss opportunities to seize new markets for low emitting goods and services, and could be vulnerable to changing market realities (such as moves by other jurisdictions to erect trade barriers against those who have failed to take equivalent action to reduce emissions, as envisaged in the US).

There are strong economic imperatives to devise a clear path forward. The Intergovernmental Panel on Climate Change has found that, globally, the cost of reducing emissions is significantly less than the cost of responding to the adverse impacts associated with climate change. Moreover, independent think tanks, like Canada's National Roundtable on the Environment and Economy, have shown that delay in taking action to reduce emissions increases the overall cost of meeting emission reduction targets, by creating uncertainty for business and locking in less efficient capital stock. However, in the absence of a truly global approach to tackling climate change, a critical design consideration for any policy framework has to be the competitive implications of any jurisdiction-specific approach to reducing emissions, particularly with respect to key exporting industries who operate in multiple jurisdictions and whose product price is determined by international markets.

As an oil burning electricity generating station, Holyrood was the third largest source of greenhouse gas emissions in our province in 2010. If the Muskrat Falls project is sanctioned and Holyrood decommissioned, it will displace an estimated 1.2 million tonnes of greenhouse gas emissions in our province every year.

A key priority for the Government of Newfoundland and Labrador is ensuring the province takes advantage of the economic development opportunities associated with the global transition to a low-carbon economy and greater energy efficiency. On a global scale, the market value of the green economy is estimated to be worth approximately US$5.2 trillion (Source: Globe, 2010). Nine key sectors have been identified as presenting real opportunities in this province in the green economy. A recent study commissioned by the Office in partnership with the Department of Innovation, Business and Rural Development concluded that with the right supports the 'green economy' in Newfoundland and Labrador could grow by up to 30 percent by 2020.

Since all sectors (households, small business, large industry, government, etc.) are responsible for emitting GHG emissions, all sectors must contribute to reducing emissions. Without such economy-wide engagement, the costs and benefits of action will not be fairly distributed. In advancing work, there are opportunities to engage individuals to deepen understanding and capacity and drive action.

Challenges

Climate change is a global challenge but the impacts will be felt in our province. There is an extensive body of research on the impacts of climate change in Newfoundland and Labrador; however, as a large province, the impacts can vary from northern Labrador to eastern Newfoundland and locations in between. As a result, a key challenge as the Provincial Government implements its Climate Change Action Plan is to continue to develop, gather, and interpret developments on climate science to ensure the province's efforts to promote adaptation are based on sound evidence, effective, and well-targeted across the province.

In the 2011 Climate Change and Energy Efficiency Action Plans, the Provincial Government made clear that intergovernmental collaboration will be key to achieving progress. Globally, the main forum to shape a response to climate change has been the *United Nations Framework Convention on Climate Change*. However, progress towards a new global agreement has been slow and there is no certainty when, if ever, consensus can be reached. These negotiations affect Newfoundland and Labrador as any agreement endorsed by the federal government would set out their commitments, which it would then have to take forward in collaboration with provinces and territories. The federal government has committed to reduce its greenhouse gas

emissions by 17 per cent below 2005 levels by 2020. However, the *2012 Spring Report of the Commissioner of the Environment and Sustainable Development* has asserted that it is unlikely that Canada will meet this target with the current measures in place. The federal government continues to develop its policy approach on climate change, with measures in place for transportation and coal-fired electricity, but its approach to other sectors of interest to the province including oil and gas and mining remain uncertain.

In *Charting Our Course*, the Provincial Government reaffirmed its targets for greenhouse gas reduction, stating they are "designed to challenging to motivate action and raise levels of ambition". The Action Plan set out that the province will approach, if not achieve, its target for 2010 (there is a 16 month delay in data reporting, therefore 2010 levels will not be known until April 2012), but there are challenges on the horizon as the province's works to achieve its 2020 target (10 per cent below 1990 levels). Even accounting for the Muskrat Falls hydroelectric project which would deliver 55 per cent of the reductions needed, GHG emissions could grow to 9.3Mt by 2020. This heightens the need for the Climate Change Action Plan and its implementation, as well as identifying any further policy measures that may be necessary to achieve the 2020 target.

The Provincial Government also has an ambitious, but challenging, target for energy efficiency. In *Moving Forward,* Government reaffirmed its commitment to the target of the Conference of New England Governors and Eastern Canadian Premiers to reduce overall energy use by 20 per cent by 2020 from business-as-usual projections. This builds on a 2008 commitment by the Council of the Federation to improve energy efficiency by 20 per cent by 2020. Energy efficiency initiatives offer considerable opportunities for the province but barriers exist including low awareness of what can be done and uncertainty about how long the original costs can be recouped by lower energy costs over time. The upcoming public awareness campaign is specifically targeted at promoting more uptake of energy efficiency and overcoming some of the common barriers such as lack of information and uncertainty about available programs.

6. Appendix A: Strategic Directions

Strategic directions are the articulation of desired physical, social or economic outcomes that normally require action by more than one government entity. These directions are generally communicated by government through platform documents, Throne and Budget Speeches, policy documents and other communiqués. The Transparency and Accountability Act requires departments and public bodies to take into account these strategic directions in the preparation of their performance-based plans. This action will facilitate the integration of planning practices across government and will ensure that all entities are moving forward on key commitments.

The direction related to the Office of Climate Change, Energy Efficiency and Emissions Trading is provided below.

Title: **Climate Change and Energy Efficiency**

Outcome: A province that has advanced its capacity to reduce greenhouse gas emissions, adapt to the impacts of climate change and improve energy efficiency.

Components of Strategic Direction	This Direction is Addressed in entity's		
	Business Plan	Operational Plan	Work Plan
Released a Climate Change Action Plan and an Energy Efficiency Action Plan.	X		
Advanced the province's ability to understand and adapt to climate change	X		
Supported the promotion of energy efficiency and the reductions of greenhouse gas emissions in Newfoundland and Labrador	X		

7. Appendix B: Financial Statements

Expenditure and revenue figures included in this document are un-audited and based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for the year ending March 31, 2012. Audited financial statements are a requirement at the government level and are made public through the Public Accounts process. The Office is not required to submit a separate audited financial statement.

Item	2011-12 Budget	2011-12 Revised
Salaries	$806,000	$512,373
Employee Benefits	$5,000	$2,015
Transportation and Communications	$50,000	$33,769
Supplies	$20,000	$12,362
Professional Services	$450,000	$645,256
Purchased Services	$20,000	$33,769
Property, Furnishings and Equipment	$10,000	$13,437
Total	$1,361,000	$1,255,251

Newfoundland
Labrador

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